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#### REMARKS

#### **Introductory Comments:**

Claims 1-21 were examined in the Office Action under reply and stand rejected under (1) 35 U.S.C. 35 U.S.C. §112, second paragraph; and (2) 35 U.S.C. §103(a). These rejections are believed to be overcome for reasons discussed below.

### Overview of the Above Amendments:

Claims 22-102 have been canceled as directed to a non-elected invention.

Claim 1 has been amended to delete the terminology "and/or", "capable of" and "via" all objected to by the Office. Additionally, the phrase "production of light" in step (D)(II) has been amended to read "emission of light." No new matter has been added by way of the foregoing amendments.

Amendment of claim 1 and cancellation of claims 22-102 is made without prejudice, without intent to abandon any originally claimed subject matter, and without intent to acquiesce in any rejection of record. Applicants reserve the right to bring the canceled claims again in a related application.

## Rejections Under 35 U.S.C. §112, Second Paragraph:

Claims 1-21 were rejected under 35 U.S.C. §112, second paragraph as indefinite. The Office alleges the preamble of claim 1 does not correlate with the body of the claim because the preamble recites a method of determining the amount of an analyte of interest but the claim "does not recite method steps for determining the amount of analyte of interest." Office Action, page 2. The Office further objects to the use of the term "and/or" in the preamble. Applicants have deleted the phrase "and/or amount" from the claim. Accordingly, the preamble now recites a "method for determining the presence of an analyte of interest in a test sample." These bases for rejection are therefore moot.

Claim 1 was also objected to for use of the term "capable of." This term has now been deleted from the claim. Additionally, the Office objected to the term "via" in part (D)(iii). This term has been deleted and the term "through" inserted in its place. Finally,

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the Office argued that there was insufficient antecedent basis for the phrase "production of light" occurring in part (D)(II) of claim 1. The term "emission" has been substituted for the term "production." Step (B)(i)(a) of claim 1 recites that the "semiconductor nanocrystal...emits light of a characteristic emission peak." Thus, adequate antecedent basis for the phrase in Step (D)(II) is indeed present.

Withdrawal of the rejections under 35 U.S.C. §112, second paragraph is therefore respectfully requested.

## Rejections Under 35 U.S.C. §103(a):

Claims 1-21 were rejected under 35 U.S.C. §103(a) as follows:

- (1) Claims 1-5, 10, 11, 13-15 and 17-19 were rejected over U.S. Patent No. 6,352,862 to Davis et al. ("Davis"), in view of U.S. Patent No. 6,274,323 to Bruchez et al. ("Bruchez");
- (2) Claims 6, 7, 12, 16 and 20 were rejected over Davis and Bruchez and further in view of U.S. Patent No. 6,444,143 to Bawendi et al. ("Bawendi");
- (3) Claims 8 and 9 were rejected over Davis and Bruchez, in view of Bawendi and further in view of U.S. Patent No. 5,990,479 to Weiss et al; and
- (4) Claim 21 was rejected over Davis and Bruchez in view of U.S. Patent No. 6,372,514 to Lee et al.

Applicants note that each of these combinations relies on Bruchez. However, Bruchez is not properly citable art against the present claims. In particular, Bruchez and the present application include an inventor in common, Robert H. Daniels and the unclaimed subject matter in Bruchez, directed to the invention claimed herein, is attributable to the inventors in the present application.

To evidence that this is indeed the case, applicants are submitting a Declaration of Inventorship signed by Daniels and Watson, the inventors of the presently claimed invention. As stated in the Declaration, applicants believe that they are the original joint inventors of the subject matter claimed in the instant application, that they are the original joint inventors of any unclaimed subject matter directed to the present invention disclosed but not claimed in Bruchez, and that all other coinventors on the Bruchez patent who are

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not named as inventors in the present application (Marcel P. Bruchez, Stephen A. Empedocles, Vince E. Phillips, Edith Y. Wong and Donald A. Zehnder) did not conceive of the methods that are claimed in the present application.

Accordingly, the Bruchez patent is not "an application for patent by another" as required by 35 U.S.C. §102(e) and is therefore not properly citable art against the present application. Withdrawal of all of the above rejections under 35 U.S.C. §103(a) is therefore respectfully requested.

#### **CONCLUSION**

Applicants respectfully submit that the claims define an invention that is patentable over the art and that complies with the requirements of 35 U.S.C. §112. Accordingly, allowance is believed to be in order and an early notification to that effect would be appreciated.

If the Examiner notes any further matters which he believes may be resolved by a telephone interview, he is encouraged to contact the undersigned by telephone at 650-843-5589.

Respectfully submitted,

Dated:

4/28/03

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# **VERSION WITH MARKINGS TO SHOW CHANGES MADE**

Claims 22-102 have been canceled.

Claim 1 has been amended as follows:

- 1. (Amended) A method for determining the presence [and/or amount] of an analyte of interest in a test sample, said method comprising the steps of:
- (I) applying the test sample to a test strip to form a sample mixture in a sample reservoir, said test strip comprising
  - (A) a chromatographic medium;
  - (B) the sample reservoir disposed on said chromatographic medium for receiving said test sample, said sample reservoir comprising
    - (i) a first detection reagent comprising
    - (a) a first detection ligand [capable of] that selectively [binding] binds a first target moiety of said analyte of interest, wherein (i) said first detection ligand is conjugated with a semiconductor nanocrystal which, when exposed to a light of a selected excitation wavelength, [is capable of emitting] emits light of a characteristic emission peak, and (ii) binding of said first detection ligand to said first target moiety forms a detection complex,
  - (C) a capture reagent immobilized on said chromatographic medium within a capture region which is distinct from said sample reservoir, wherein said capture reagent comprises a capture ligand [capable of] that selectively [binding] binds said first detection complex to form an immobilized capture complex; and
  - (D) a control ligand immobilized on said chromatographic medium within a control region distinct from said sample reservoir and said capture region, wherein said control ligand [is capable of] selectively [binding] binds said first detection ligand to form an immobilized control complex;

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wherein (i) said test strip has first and second ends, said sample reservoir is disposed at said first end, and said capture region is interposed between said sample reservoir and said control region, (ii) said sample mixture comprises said test sample and said first detection reagent, (iii) said sample mixture is transported [via] through said chromatographic medium from said first to said second end, (iv) said first detection ligand binds said first target moiety to form said detection complex, said detection complex is bound by said capture reagent, and said first detection ligand which is not bound to said first target moiety is bound to said control ligand; and

(II) exposing said test strip to said light of a selected excitation wavelength, wherein the [production] emission of light of said characteristic emission peak in both the capture and control regions is indicative of the presence of the analyte in the test sample.